Stopping Automobiles with Microwave Beams Abstract for 1997 HPM Conference

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In 1994 to support a Department of Justice request, LLNL performed experiments stopping automobile engines with microwave beams. Using laboratory equipment, we beamed microwaves onto an engine. The engine, which was idling, stopped within a couple of seconds.

Because our equipment could only generate modest amounts of power, the hood was opened to maximize the exposure. We have shielding measurements to predict power levels needed to stop the engine with the hood closed and from various angles.

Our automobile was a standard government issued sedan that is a few years old. We believe that the microwave confused the computer. A sensor was upset and gave the computer a too lean reading. In response, the fuel mixture was enriched to the point of stopping the engine. After the experiment, we drove the automobile back to our office 15 miles away. After hundreds of exposures under various stressing conditions, the sensor did quit.

We will present our data in a classified talk and tell our story about how the media changed our story.

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